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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,779	12/27/2001	Hyoungh taek Kim	SI-0015	9759

34610 7590 10/18/2005

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EXAMINER

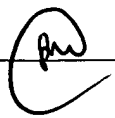
HALIYUR, VENKATESH N

ART UNIT PAPER NUMBER

2664

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,779	<b>Applicant(s)</b> KIM, HYOUNG TAEK	
	<b>Examiner</b> Venkatesh Haliyur	<b>Art Unit</b> 2664	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/27/2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/27/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>none</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1 – 22 have been examined.

### *Priority*

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. REPUBLIC OF KOREA 2000-84725 12/28/2000.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willars et al [US Pub: 2001/0053145] in view of Barany et al [US Pat: 6,839,356] and Curry et al [US Pat: 6,359,880].

Regarding claims 1,9,19, Willars et al in their invention "Combining Differing Transport Technologies in a Telecommunications System" disclosed a method and a system for inter-working a radio access network (RAN) in an Internet protocol (IP) based core network (CN), IP based CN may be routed by IP, based

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upon an Asynchronous Transfer Mode (ATM) connection and also disclosed establishing a traffic connection between a first mobile station (MS) and a first base station upon receiving a call connection request message from the first MS with a prescribed protocol [items 16, 26, 50B, 28,30 of Figs. 2B, 2C, Abstract, Paragraphs 0020 – 0031 and 0088-0148].

Willars et al disclosed that the base station supports UTRAN, but fails to disclose that the base station supports IP, a Home Location Register (HLR) configured to manage mobile communication subscribers' locations within a mobile communication network and to perform mobility control and a PDSN configured to conduct inter-working of the IP network and the mobile communication CN so as to provide packet data services for the mobile communication subscribers.

But, Barany et al in their invention "System and Method for Controlling a Wireless Packet Switched Voice Call" disclosed that the base station supports VOIP [item 104 of Fig. 1, column 6, lines 1-23] and a Home Location Register (HLR) configured to manage mobile communication subscribers' locations within a mobile communication network and to perform mobility control and a packet switched domain control (PDSN) configured to conduct inter-working of the IP network and the mobile communication CN so as to provide packet data services for the mobile communication subscribers[Fig 3, column 10, lines 3-67,column 11,lines 1-35].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Barany et al to include IP

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based base station, HLR and packet switched domain control in the system of Barany et al in order to perform mobility control and a packet switched domain control configured to conduct inter-working of the IP network and the mobile communication CN so as to provide packet data services for the mobile communication subscribers.

Both Willars et al and Barany et al fail to disclose interpreting of DN and generation and stopping of ring-back tone.

The combination of Willars et al and Barany et al as discussed above shows the limitations claimed, but fails to disclose interpreting DN and generating a ring-back tone using a prescribed protocol in their system.

However, Curry et al in their invention of "Public Wireless/Cordless Internet Gateway", disclosed a wireless gateway system that provides wireless telephone communication interworking with public packet data network that interprets DN to establish a traffic connection between a wireless handset (mobile station) and a called party or vice-versa and for the generation of a ring-back tone to the wireless caller using a prescribed protocol and stopping the generation of the ring-back tone if the called party responds, and establishing a call connection between a mobile station and the called party [columns 16, lines 6-67, 17-23]. Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the combination of Willars et al and Barany et al to include the method of interpreting DN, generation and stopping of ring-back tones to the wireless caller as taught by Curry et al in order

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to establish traffic connection between a first mobile station (MS) and a second mobile station in a RAN interworking with an IP based (BSS-IP) core network.

Regarding claim 2,11, Willars et al disclosed that the first MS is a call originating MS, the second MS is a call receiving MS, the first base station is associated with the first MS, and the second base station is associated with the second MS [items 28 and 30 of Fig 2B, Para 0047-0051].

Regarding claims 3, Willars et al disclosed the prescribed the prescribed protocols comprise matching signal protocols for the signal connection transfer and the traffic connection control protocols [Figs. 1, 6B, 9A, Para 0102, 0103].

Regarding claim 10, Willars et al disclosed the IP based CN may be routed by IP, based upon an Asynchronous Transfer Mode (ATM) connection for high-speed data transport [Fig 3A, Para 0026].

Regarding claims 4,12 -18, Willars et al disclosed the prescribed matching signal protocol comprising of M3UA, SCTP, IP, L2 and matching traffic protocol as UDP and IP [Figs. 1, 6B, 9A, Para 0102, 0103]. Willars et al fails to disclose MGCP, SCCP, RTP, MAC, interoperability and RTCP and voice encoding. But, Barany et al disclosed the matching signaling protocols comprising of as MGCP, SCCP, UDP, L2 and Physical and matching traffic connection control protocols as RTP (Real Time Protocol)/RTCP (Real Time Control Protocol), UDP, IP, Voice Encoded Data (Codec), interoperability, LLC, MAC and Physical [Figs. 3 & 5, columns 9 -12, column 13, lines 10-31] for the purposes of claim limitations.

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the system of Willars et al to include

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MGCP, SCCP, RTP and RTCP, interoperability and voice encoding in the system of Barany et al in order to establish traffic connection between a first mobile station (MS) and a second mobile station in a RAN interworking with an IP based (BSS-IP) core network.

Regarding claims 5-8, 20-22, Willars et al disclosed for both originating MS and a terminating MS, transmitting a call connection request message from the MS through the base station to a interworking gateway router [item 50B of 2B] (WCA) and transmitting a connection request message from the WCA to base station using a control protocol and assigning traffic connection ports to the IP network of the MS and transmitting a response message from the base station to WCA and transmitting a resource assignment message from the WCA to the base station using the UDP port number and confirming the completion of the traffic connection to the MS and transmitting a response message from the base station to the WCA [Figs. 2B, 3A, 3B,4A,4B, Para 0010, 0053-0087]. But Willars et al fails to disclose BSS-IP and matching protocol MGCP.

However, Barany et al, disclosed base station that supports IP, matching signaling and traffic protocols that supports MGCP, packet switched domain control systems [[item 104 of Fig. 1, column 6, lines 1-23, Figs. 3 & 5, columns 9-12, column 13, lines 10-31].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Barany et al to include base station that supports IP and matching protocol MGCP in the system of Willars et al to establish IP traffic connection between a mobile station (MS) and

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a base station subsystem for IP (BSS-IP) using a prescribed protocol.

The combination of Willars et al and Barany et al as discussed above shows the limitations claimed, but fails to disclose interpreting DN and generating a ring-back tone using a prescribed protocol in their system.

Curry et al in their invention of "Public Wireless/Cordless Internet Gateway", disclosed a wireless gateway system that provides wireless telephone communication interworking with public packet data network that interprets DN to establish a traffic connection between a wireless handset (mobile station) and a called party or vice-versa and for the generation of a ring-back tone to the wireless caller using a prescribed protocol and stopping the generation of the ring-back tone if the called party responds, and establishing a call connection between a mobile station and the called party [columns 16, lines 6-67, 17-23].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the combination of Willars et al and Barany et al to include the method of interpreting DN, generation and stopping of ring-back tones to the wireless caller as taught by Curry et al in order to establish traffic connection between a first mobile station (MS) and a second mobile station in a RAN interworking with an IP based (BSS-IP) core network.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art in reference here are Willars et al, Barany et al and Curry et al.



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4. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached @ (571)-272-3134. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

  
Ajit Patel  
Primary Examiner